BookletChart™

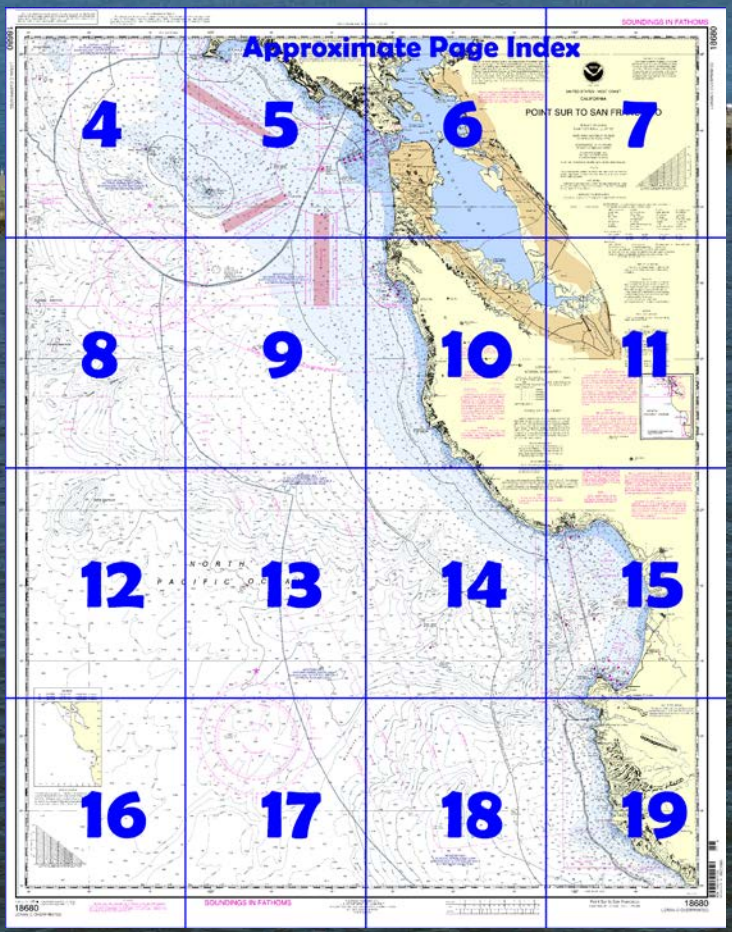
Point Sur to San Francisco

NOAA Chart 18680

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.

- *Complete, reduced-scale nautical chart*
- *Print at home for free*
- *Convenient size*
- *Up-to-date with Notices to Mariners*
- *Compiled by NOAA's Office of Coast Survey, the nation's chartmaker*



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=18680.

(Selected Excerpts from Coast Pilot)
Monterey Bay is a broad open bight 20 miles wide between Point Pinos and Point Santa Cruz. From Point Santa Cruz the coast curves W and N for 23 miles to Pigeon Point, and then extends for 25 miles in a general NNW direction to Point San Pedro, the S headland of the Gulf of the Farallones. Between Cypress Point and Point Pinos the coast is bold and the 30-fathom curve is less than 1 mile from shore in many places; deep submarine valleys extend into Carmel Bay and Monterey Bay. N of Monterey Bay, depths are more regular and the few dangers extend less than 1 mile from shore.

Sea Otter Refuge.–The State of California Fish and Game Code prohibits the discharge of firearms or bows and the trapping of birds or mammals in the California Sea Otter Game Refuge. The refuge extends as a continuous band between the coastline and the three nautical mile limit for the state of California extending offshore from the mouth of the Santa Rosa Creek (35°34'N.) in the N. (See charts 18700 and 18680.) Additional information may be obtained by writing the Department of Fish and Game, Marine Region, 20 Lower Ragsdale Drive, Suite 100, Monterey, CA 93940, telephone 831-649-2870.

Monterey Bay National Marine Sanctuary was established to protect and manage the conservation, ecological, recreational, research, educational, historical and esthetic resources and qualities of the coastal and ocean waters and submerged lands in and surrounding Monterey Bay. (See **15 CFR 922**, chapter 2, for limits and regulations).

From Point Santa Cruz the coast trends W about 4 miles to Needle Rock Point and thence NW to Point Ano Nuevo.

Point Ano Nuevo, 18 miles NW of Point Santa Cruz, is formed by sand dunes 20 to 100 feet high. A lighted whistle buoy is about 0.8 mile S of the tower.

Anchorage with protection from N and NW winds can be had in the bight S of the point. The kelp bed and reef, extending a little over 0.5 mile SE from the islet, break the force of the swell.

Pigeon Point Light (37°10'54"N., 122°23'38"W.), 148 feet above the water, is shown from a 110-foot white conical tower on the end of the point. The light cannot be seen in the bight E of a line joining Pigeon Point and Pillar Point, 20 miles to the N. The light station buildings on Pigeon Point are white with red roofs.

From Pigeon Point for 4 miles to **Pescadero Point,** the coast is nearly straight and is composed of reddish cliffs with numerous outlying submerged and visible rocks. A rocky patch covered 3 feet is about 0.8 mile S of Pescadero Point; a 6¼-fathom rocky patch is about 0.7 mile WSW of the point.

Point Montara, 2.8 miles N of Pillar Point, is the seaward end of a spur from Montara Mountain and the NW extremity of the ridge forming Pillar Point. It terminates in cliffs about 60 feet high with numerous outlying rocks. Covered rocks and ledges lie 0.8 mile W of the point and extend in a NW direction for about 1.5 miles. This is a dangerous locality in thick weather, and extreme caution should be used when inside the 30-fathom curve.

Point Montara Light (37°32'11"N., 122°31'09"W.), 70 feet above the water, is shown from a 30-foot white conical tower on the point. A group of white buildings with red roofs is prominent on the point.

Point San Pedro is a dark, bold, rocky promontory, 640 feet high. It is the seaward termination of Montara Mountain and is an excellent mark in clear weather from either N or S. A large triple-headed rock, about 100 feet high and white on its S face, projects 0.3 mile W from the point. A rocky area, which breaks in a heavy swell, is reported to exist about 1 mile N of the point.

A 200-yard-long Municipal fishing pier is about 2.5 miles NE of Point San Pedro.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Alameda	Commander 11th CG District Alameda, CA	(510) 437-3700

Table of Selected Chart Notes

Corrected through NM Jun. 11/05
Corrected through LNM Jun. 7/05

NOTE J

IMO - adopted Recommended Tracks for vessels 300 gross tons and above (except those carrying hazardous cargo in bulk or crude oil).

NOTE I

IMO - adopted Recommended Tracks for vessels carrying hazardous cargo in bulk (including ore concentrates, explosives, munitions, chemicals, liquefied gases, refined products, distillates or other non-persistent cargo).Vessels using these tracks should use the Western TSS when entering or leaving San Francisco.

SEA OTTER RFUGE

The State of California Fish and Game Code prohibits the use of bows and firearms and the trapping of birds and mammals in the California Sea Otter Game Refuge.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.237" southward and 3.876" westward to agree with this chart.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

NOTE H

The San Francisco Bay Vessel Traffic Service is not shown on this chart. See Charts 18645 and 18649.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. Pise, CA	KHB-49	162.40 MHz WX2
Mt. Umunhum, CA	KEC-49	162.55 MHz WX1
Mt. Umunhum, CA	WWF-64	162.45 MHz WX5

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

NOTE B

MAIN SHIP CHANNEL

The project depth is 55 feet. For controlling depth see chart 18649.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

NOTE G

CHEMICAL MUNITIONS DUMPING AREA-RESTRICTION

Site was formerly used or designated for U.S. chemical munitions dumping. Such use has been discontinued. Designation of such area in no way constitutes authority for dumping.

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9940..... 99.400 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M ..... Master
W ..... Secondary
X ..... Secondary
Y ..... Secondary
Z ..... Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

9940-W 9940-X 9940-Y

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on theoretically determined overland signal propagation delays. They have not been verified by comparison with survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

NOTE F

PRECAUTIONARY AREA

Traffic within the Precautionary Area may consist of vessels making the transition between the Main Ship Channel and one of the established traffic lanes. Mariners are advised to exercise extreme caution when navigating within this area. The normal cruising area of the pilot vessel is indicated "PILOT AREA." When passing Traffic Lane Lighted Buoys "S", "W", or "N", inbound vessels should contact the pilot boat on channel 13 for boarding instructions.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in San Francisco, California.

Refer to charted regulation section numbers.

NOTE E

TRAFFIC SEPARATION SCHEME

One-way traffic lanes overprinted on this chart are recommended for use by all vessels traveling between the points involved. They have been designed to aid in the prevention of collisions at the approaches to San Francisco Bay but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation zones should not be used except for crossing purposes. Mariners are requested to stay outside the circular separation zone centered on the San Francisco Approach Lighted Horn Buoy SF. When crossing traffic lanes and separation zones use extreme caution.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: — — — —

NATIONAL MARINE SANCTUARY NOTE

National Marine Sanctuaries are protected areas, administered by NOAA, which contain abundant and diverse natural resources such as marine mammals, seabirds, fishes and tidepool invertebrates. These areas are particularly sensitive to environmental damage such as spills of oil and other hazardous materials, discharges, and groundings. Exercise particular caution and follow applicable Sanctuary regulations when transiting these areas to avoid environmental impacts. A full description of Sanctuary regulations may be found in 15 CFR Part 922 and in Coast Pilot.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

HEIGHTS

Elevations of rocks, bridges, landmarks, and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

NOTE C

The U.S. Coast Guard operates an Offshore Vessel Movement Reporting System (OVMRS) covering the seaward approaches to San Francisco Bay. All commercial vessels over 300 gross tons and all tugs with tows are requested to contact Vessel Traffic Service San Francisco on VHF-FM channel 12 (156.60 MHz) when entering this area. All vessels in the area are encouraged to listen on channel 12 at fifteen and forty-five minutes past each hour for broadcast reports of known shipping traffic in the area. Additional information on the OVMRS is published in Coast Pilot 7 and information concerning specific operating procedures is available from the VTS.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

VESSEL TRANSITING

The U.S. Coast Guard and the Pacific States/British Columbia Oil Spill Task Force endorse a system of voluntary measures and minimum distances from shore for certain commercial vessels transiting along the coast anywhere between Cook Inlet, Alaska and San Diego, California. See U.S.Coast Pilot 7, Chapter 3 for details.

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	N nun	R TR radio tower
Al alternating	IQ interrupted quick	OBSC obscured	Rot rotating
B black	Iso isophase	Oc occulting	s seconds
Bn beacon	LT HO lighthouse	Or orange	SEC sector
C can	M nautical mile	Osc oscillating	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
	Mo morse code	R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

PRINT-ON-DEMAND CHARTS

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

18680

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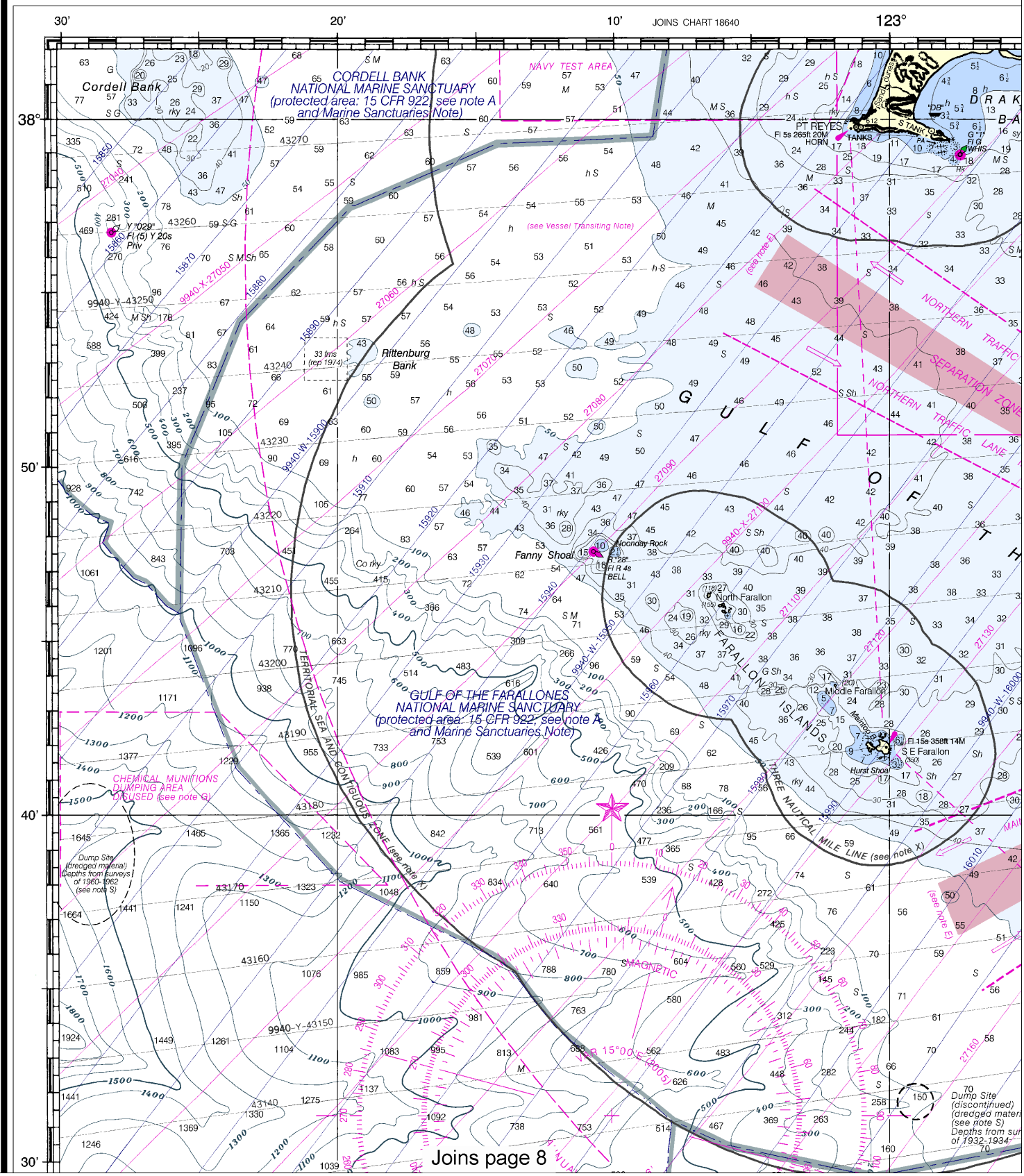
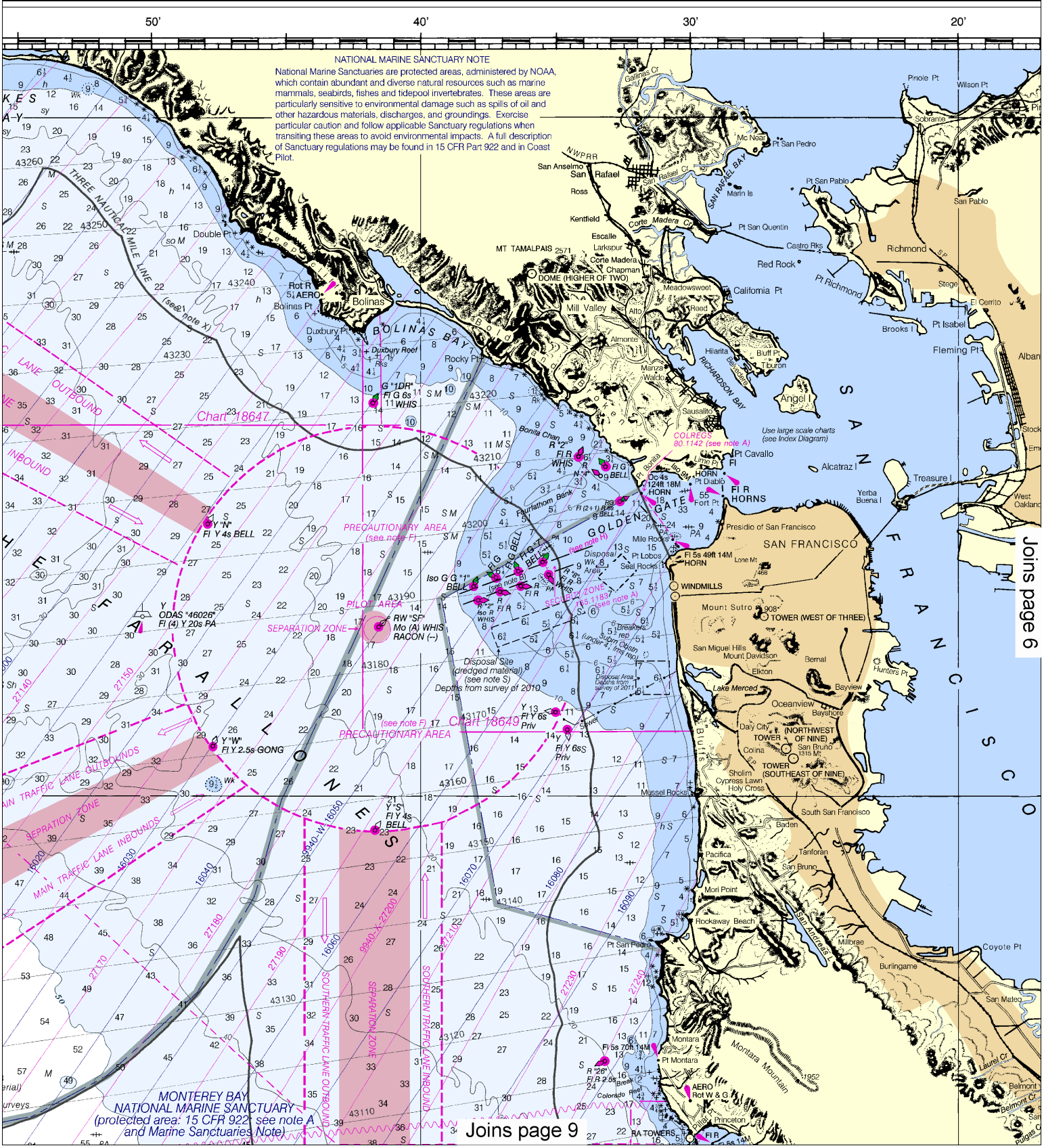


4

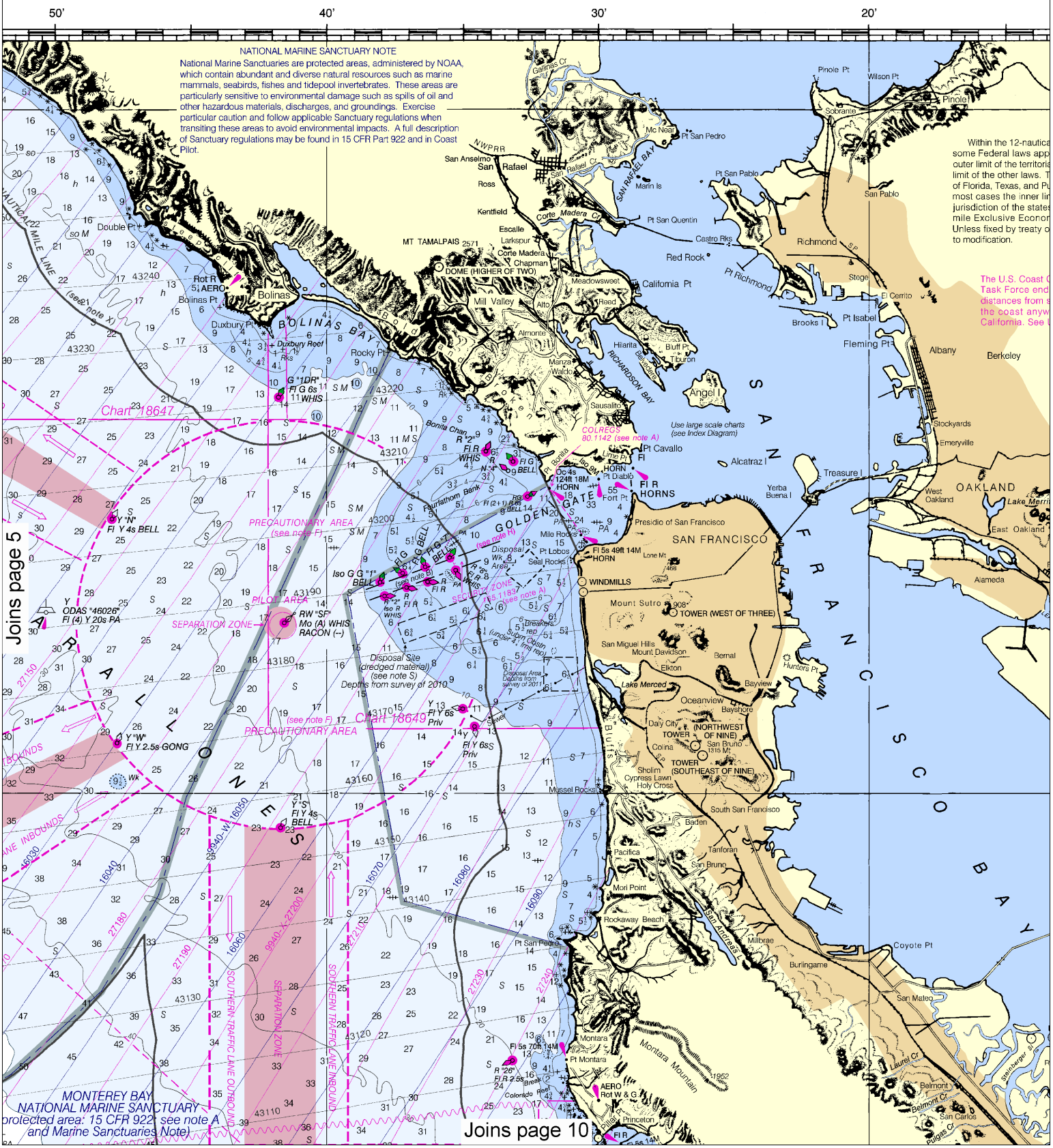
Note: Chart grid lines are aligned with true north.

Formerly C&GS 5402, 1st Ed., Feb. 1915 C-1912-117 KAPP 1866



This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:280891. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

Formerly C&GS 5402, 1st Ed., Feb. 1915 C-1912-117 KAPP 1866



6

Note: Chart grid lines are aligned with true north.

18680

LORAN-C OVERPRINTED

10' 122° 50'

38°

NOTE X

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VESSEL TRANSITING

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NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION U.S. DEPARTMENT OF COMMERCE

COAST SURVEY

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.237" southward and 3.876" westward to agree with this chart.

UNITED STATES - WEST COAST

CALIFORNIA

POINT SUR TO SAN FRANCISCO

Mercator Projection
Scale 1:210,668 at Lat 37° 20'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

(For offshore navigation only)
Use larger scale charts outlined
in purple for inshore navigation.

Additional information can be obtained at nauticalcharts.noaa.gov.

HEIGHTS

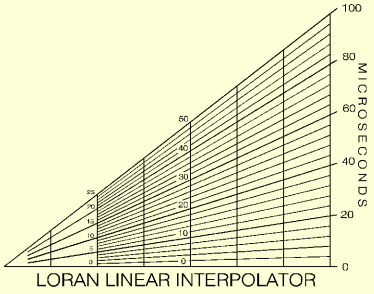
Elevations of rocks, bridges, landmarks, and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.



LORAN LINEAR INTERPOLATOR

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

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B black	Iso isophase	Oc occulting	s seconds
Bn beacon	LT HO lighthouse	Or orange	SEC sector
C can	M nautical mile	Osc oscillating	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
	Mo morse code	R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	sc soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.
COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: — — — —

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

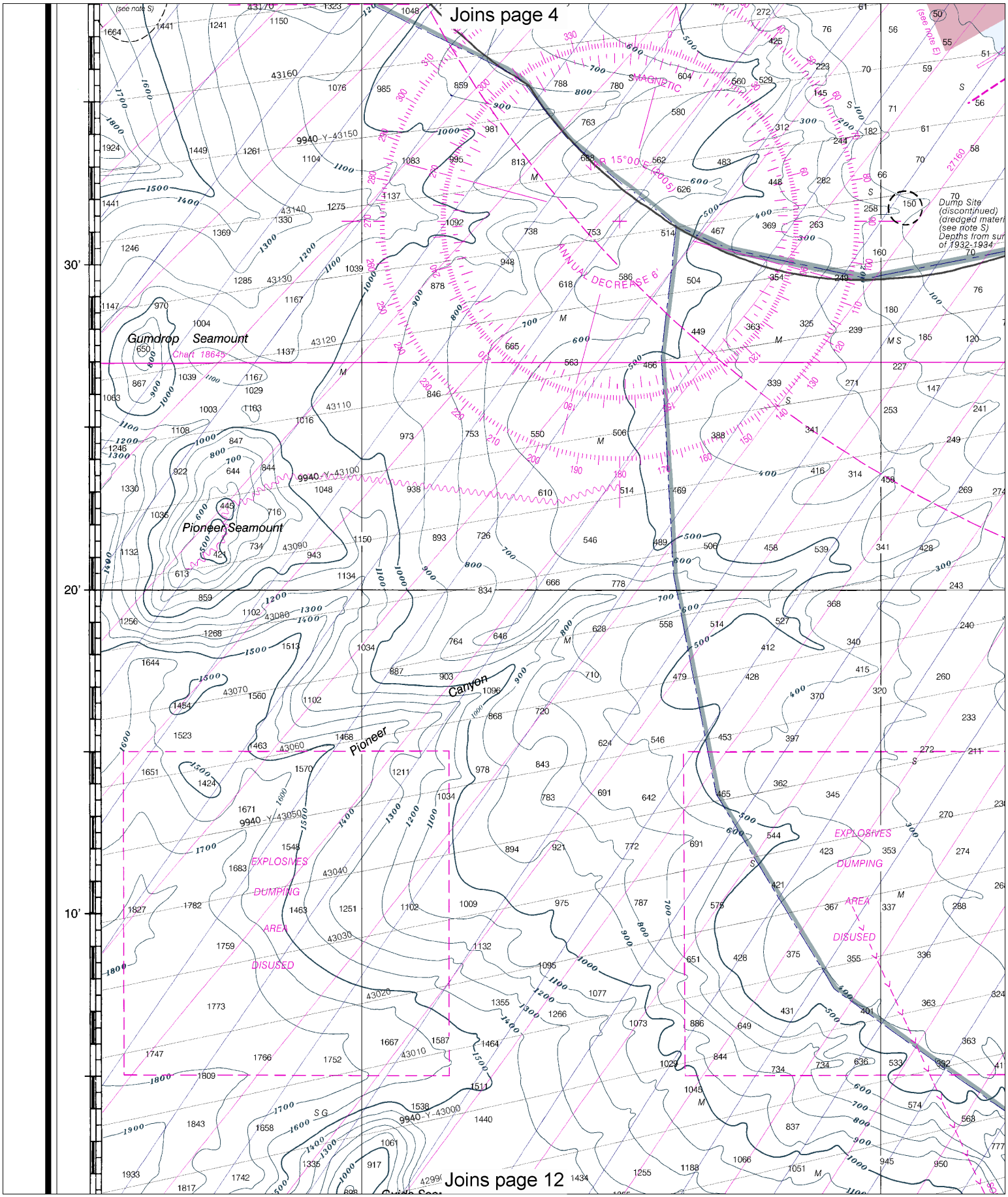
Limitations on the use of radio signals as aids to marine navigation can be found in the

Dimond
Allendale
Fruitvale
Melrose
San Leandro Bay
Elmhurst
San Leandro Cr
San Leandro
Mulford Landing
San Lorenzo
San Lorenzo Cr
Roberts Landing
Hayward
Russell City
Hayward Landing
Mt Eden
Alvarado
Decoto
Alameda Creek
Coyote Hills Slough
Coyote Hills
R TR(TALLEST)
(KNBR) 680 kHz
Redwood Pt
Dumbarton Pt
Newark Slough
Newark

40'

30'

Joins page 11



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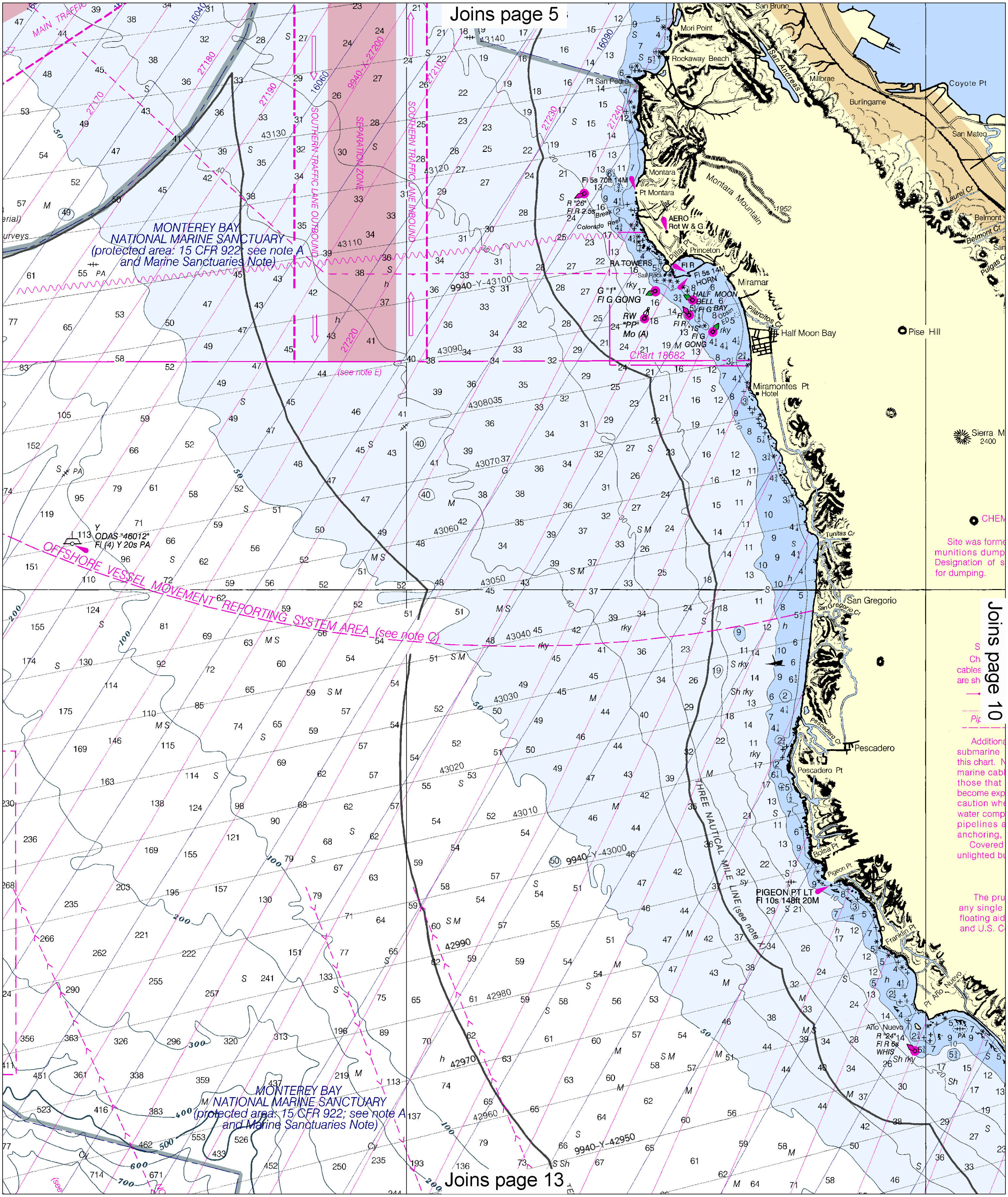
Note: Chart grid lines are aligned with true north.


Joins page 5
Joins page 10
Joins page 13
MONTEREY BAY
NATIONAL MARINE SANCTUARY
(protected area: 15 CFR 922; see note A
and Marine Sanctuaries Note)
SOUTHERN TRAFFIC LANE OUTBOUND
SEPARATION ZONE
SOUTHERN TRAFFIC LANE INBOUND
MAIN TRAFFIC
OFFSHORE VESSEL MOVEMENT REPORTING SYSTEM AREA (see note C)
THREE NAUTICAL MILE LINE (see note F)
Chart 18682
(see note E)
ODAS "46012"
Fl (4) Y 20s PA
San Bruno
Mori Point
Rockaway Beach
San Andreas
Millbrae
Coyote Pt
Burlingame
San Mateo
Pt San Pedro
Montara
Pt Montara
Montara Mountain
Laurel Cr
Belmont
Belmont Cr
AERO
Rot W & G
Princeton
Pillar Pt
RA TOWERS
Colorado Reef
HALF MOON BAY
HALF MOON BELL
Miramar
Pilarcitos Cr
Half Moon Bay
Pise Hill
Miramontes Pt
Hotel
Sierra M
2400
CHEM
Site was forme
munitions dump
Designation of s
for dumping.
Tunitas Cr
San Gregorio
San Gregorio Cr
Pescadero
Pescadero Pt
Bolsa Pt
Pigeon Pt
PIGEON PT LT
Fl 10s 148ft 20M
Franklin Pt
Año Nuevo
Pt Año Nuevo
R "24"
Fl R 6s
WHIS
R "26"
Fl R 2.5s
G "1"
Fl G GONG
RW
"PP"
Mo (A)
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9940-Y-43000
9940-Y-42950
9940-X-27200
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pipelines a
anchoring,
Covered
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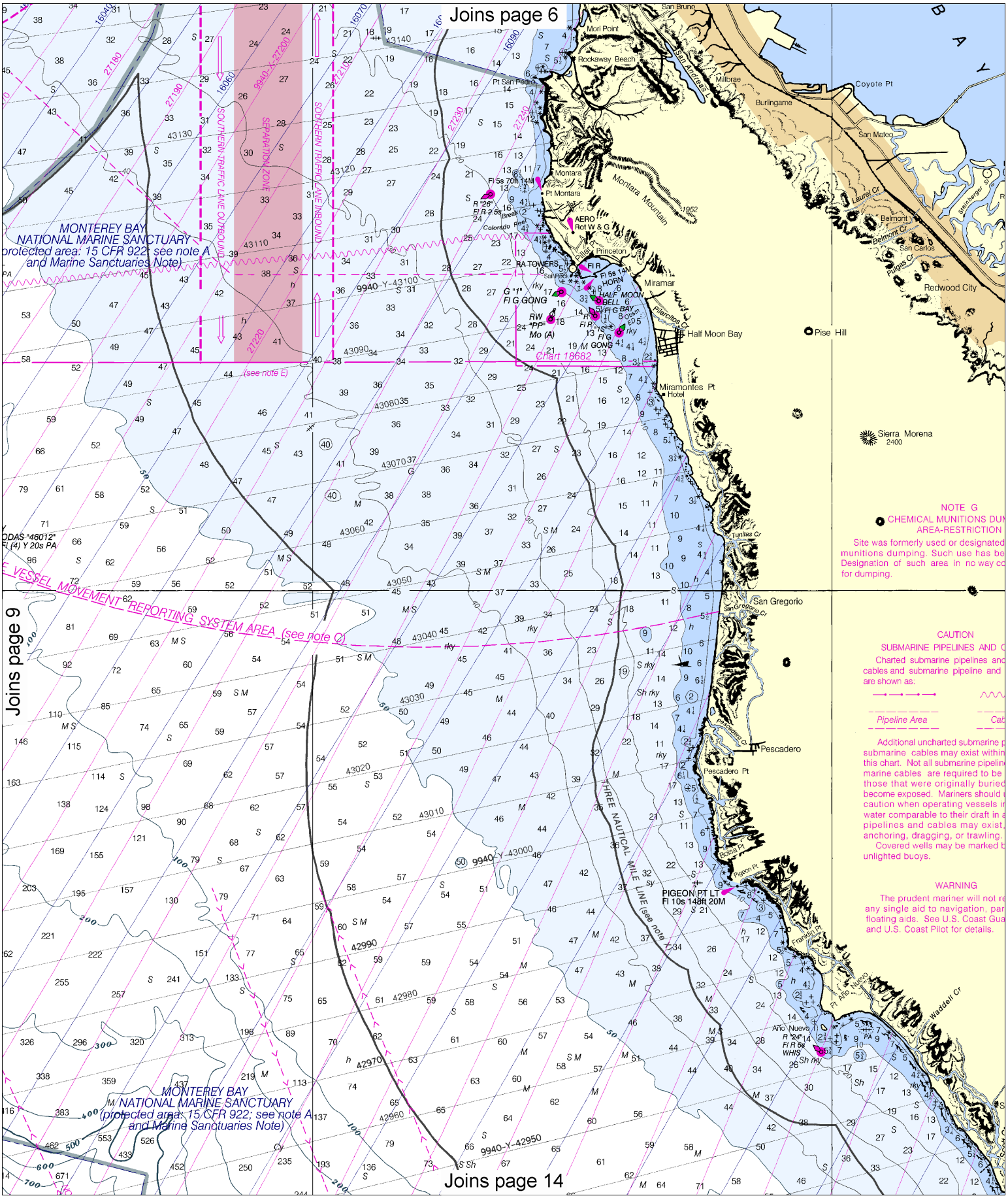
The pru
any single
floating aid
and U.S. C



Note: Chart grid lines are aligned with true north.

Joins page 7

MICRO TR microwave tower
Mkr marker
Mo morse code
R red
Ra Ref radar reflector
R Bn radiobeacon
W white
WHIS whistle
Y yellow

Bottom characteristics:

Blds boulders
bk broken
Cy clay
Co coral
G gravel
Grs grass
gy gray
h hard
M mud
Oys oysters
Rk rock
S sand
sc soft
Sh shells
sy sticky

Miscellaneous:

AUTH authorized
ED existence doubtful
Obstn obstruction
PA position approximate
PD position doubtful
Rep reported
Subm submerged

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
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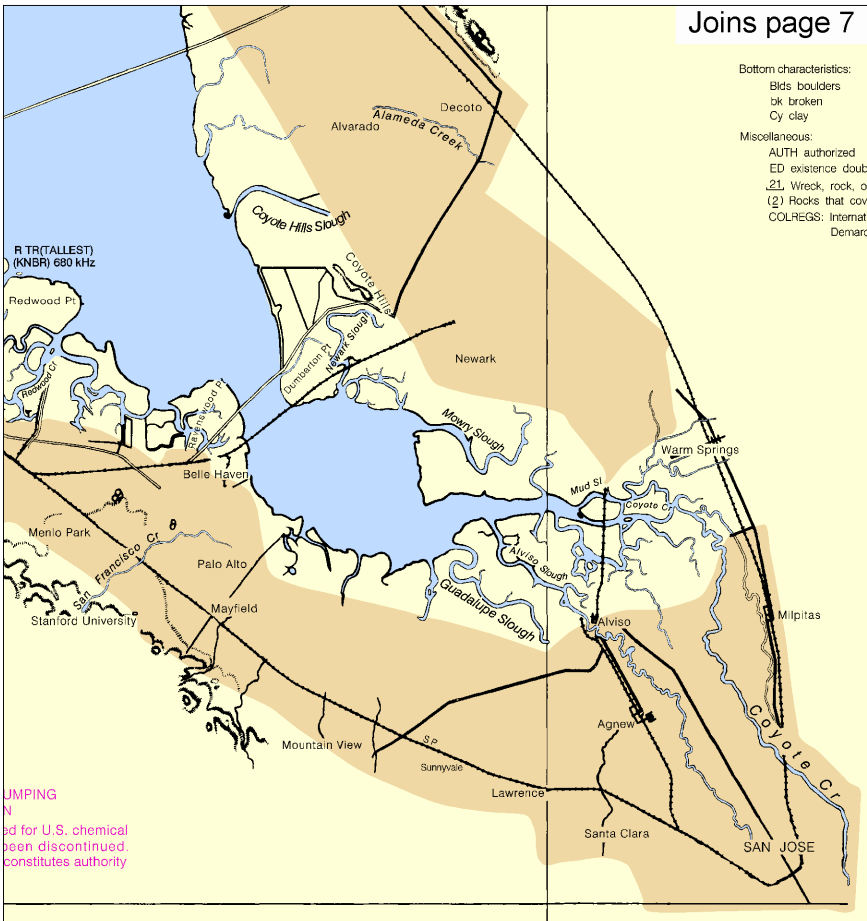

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Mt. Umunhum, CA	KEC-49	162.55 MHz WX1
Mt. Umunhum, CA	WWF-64	162.45 MHz WX5

30'
20'
10'

UMPING
N
ed for U.S. chemical
been discontinued.
constitutes authority

CABLES
nd submarine
d cable areas

able Area.

pipelines and
in the area of
ines and sub-
e buried, and
ed may have
d use extreme
in depths of
areas where
st, and when
by lighted or

rely solely on
articularly on
uard Light List

BLACK MOUNTAIN
2787

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9940..... 99,400 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M ..... Master
W ..... Secondary
X ..... Secondary
Y ..... Secondary
Z ..... Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

9940-W 9940-X 9940-Y

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on theoretically determined overland signal propagation delays. They have not been verified by comparison with survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

Swanton
Scott Cr
El Jarro Pt

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

NOTE H

The San Francisco Bay Vessel Traffic Service

NOTE E

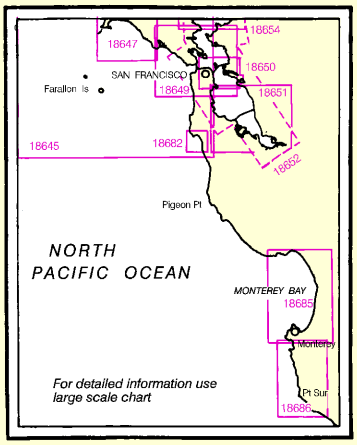
TRAFFIC SEPARATION SCHEME

One-way traffic lanes overprinted on this chart are recommended for use by all vessels traveling between the points involved. They have been designed to aid in the prevention of collisions at the approaches to San Francisco Bay but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation zones should not be used except for crossing purposes. Mariners are requested to stay outside the circular separation zone centered on the San Francisco Approach Lighted Horn Buoy SF. When crossing traffic lanes and separation zones use extreme caution.

NOTE F

PRECAUTIONARY AREA

Traffic within the Precautionary Area may consist of vessels making the transition between the Main Ship Channel and one of the established traffic lanes. Mariners are advised to exercise extreme caution when navigating within this area. The normal cruising area of the pilot vessel is indicated "PILOT AREA." When passing Traffic Lane Lighted Buoys "S", "W", or "N", inbound vessels should contact the pilot boat on channel 13 for boarding instructions.



Mount Umunhum
3486

Loma Prieta
3791

NOTE I

IMO - adopted Recommended Tracks for vessels carrying hazardous cargo in bulk (including ore concentrates, explosives, munitions, chemicals, liquefied gases, refined products, distillates or other non-persistent cargo). Vessels using these tracks should use the Western TSS when entering or leaving San Francisco.

NOTE C

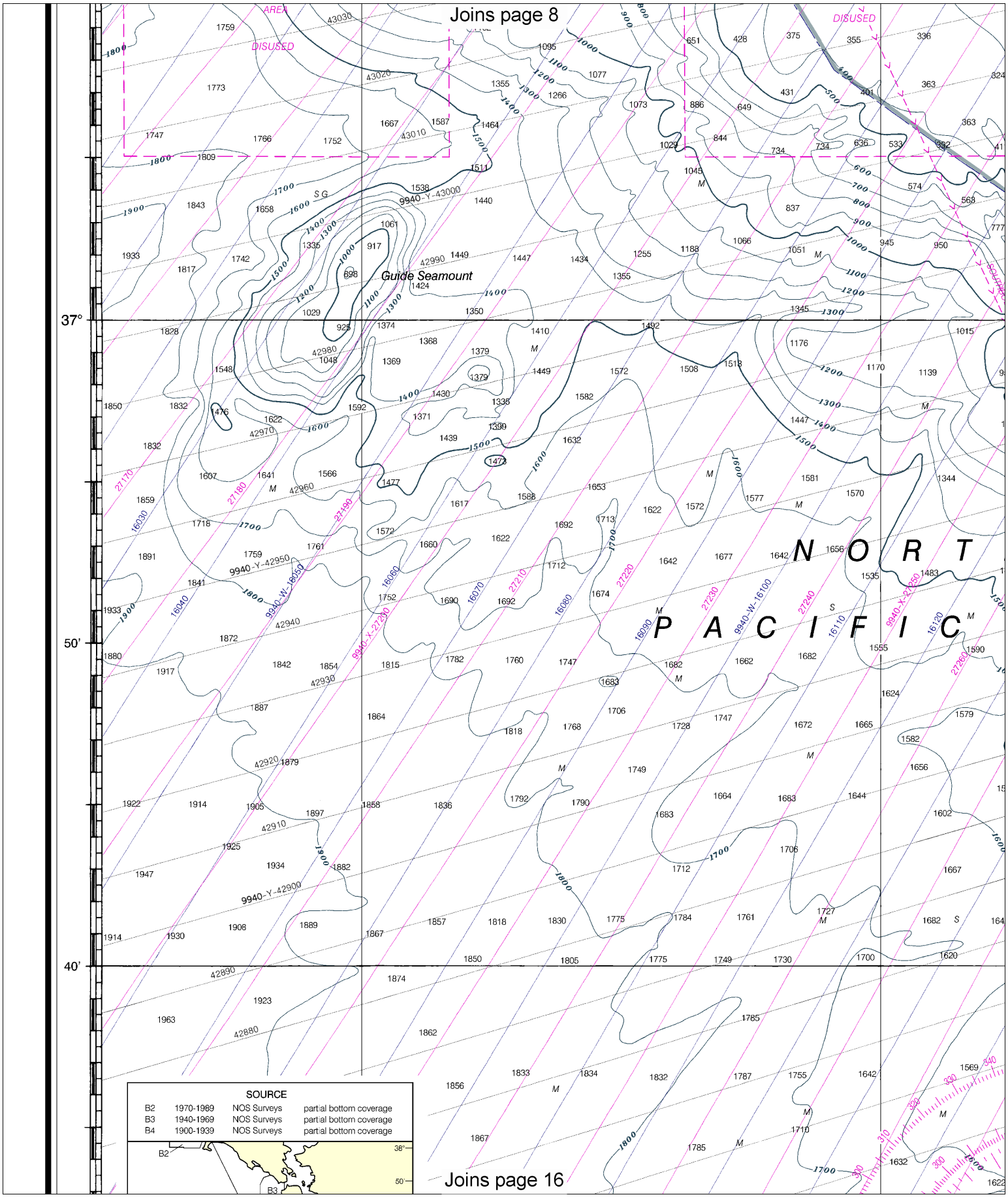
The U.S. Coast Guard operates an Offshore Vessel Movement Reporting System (OVMRS) covering the seaward approaches to San Francisco Bay. All commercial vessels over 300 gross tons and all tugs with tows are requested to contact Vessel Traffic Service San Francisco on VHF-FM channel 12 (156.60 MHz) when entering this area. All vessels in the area are encouraged to listen on channel 12 at fifteen and forty-five minutes past each hour for broadcast reports of known shipping traffic in the area. Additional information on the OVMRS is published in Coast Pilot 7 and information concerning specific operating procedures is available from the VTS.

NOTE J

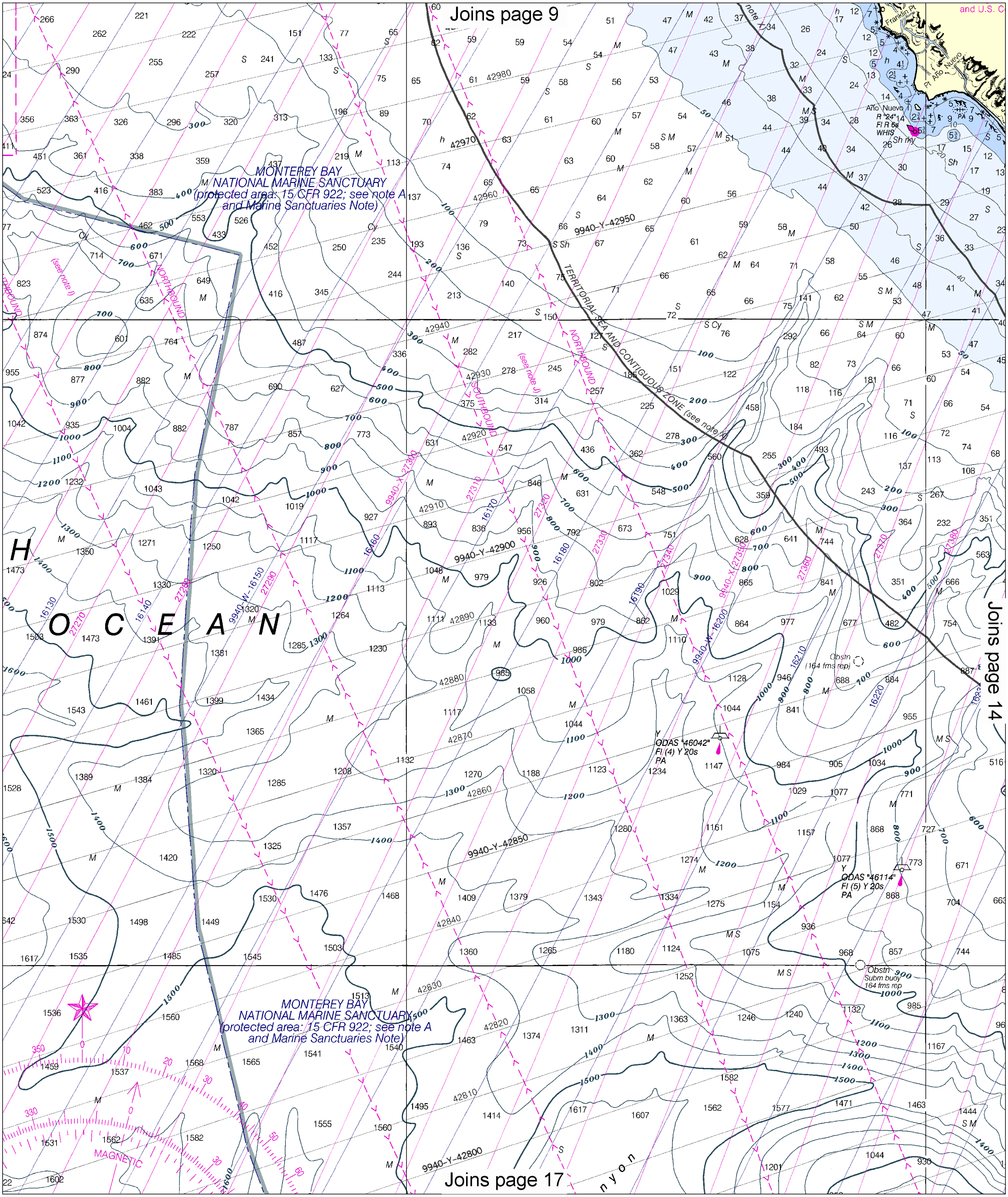
IMO - Tracks for and above

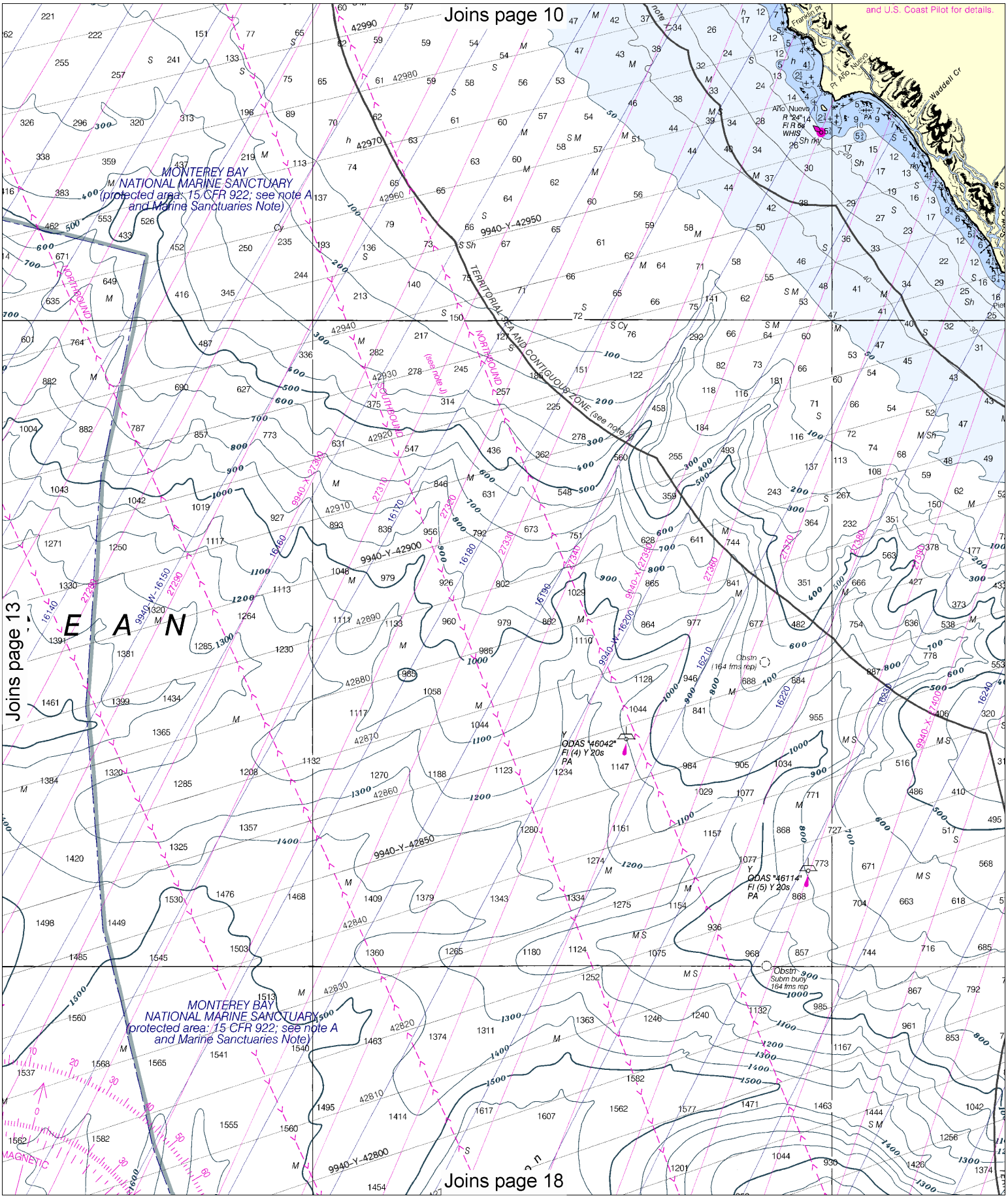
Joins page 15

NOTE A



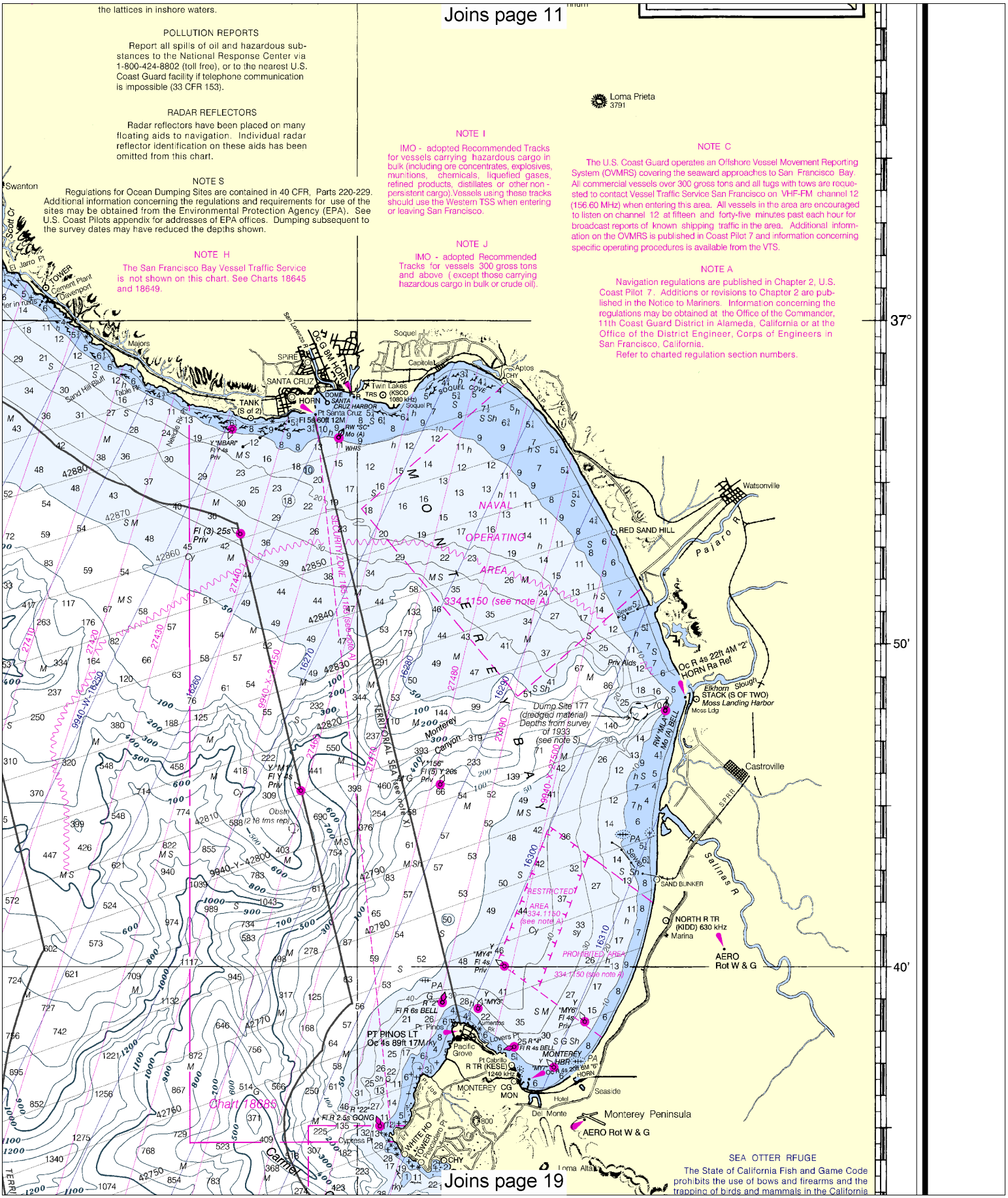
Note: Chart grid lines are aligned with true north.

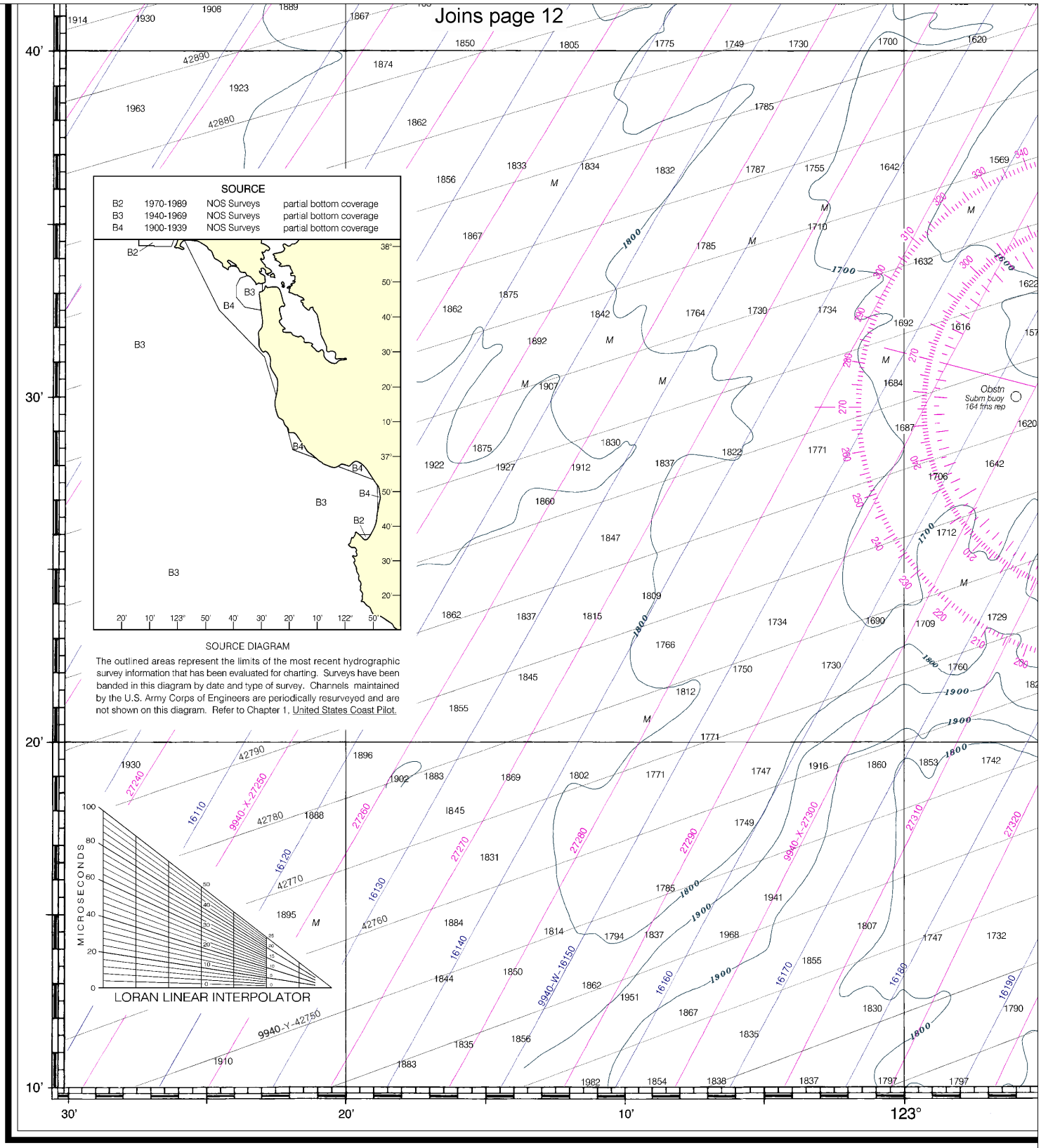

Joins page 9
Joins page 14
Joins page 17
MONTEREY BAY
NATIONAL MARINE SANCTUARY
(protected area: 15 CFR 922; see note A
and Marine Sanctuaries Note)
TERRITORIAL SEA AND CONTIGUOUS ZONE (see note K)
NORTHBOUND
SOUTHBOUND
O C E A N
Año Nuevo
Pt Año Nuevo
Franklin Pt
ODAS "46042"
FI (4) Y 20s
PA
ODAS "46114"
FI (5) Y 20s
PA
Obstn
(164 fms rep)
Subm buoy
164 fms rep
MAGNETIC
and U.S. C



14

Note: Chart grid lines are aligned with true north.


Joins page 11
the lattices in inshore waters.
POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).
RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.
NOTE S
Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.
NOTE H
The San Francisco Bay Vessel Traffic Service is not shown on this chart. See Charts 18645 and 18649.
NOTE I
IMO - adopted Recommended Tracks for vessels carrying hazardous cargo in bulk (including ore concentrates, explosives, munitions, chemicals, liquefied gases, refined products, distillates or other non-persistent cargo). Vessels using these tracks should use the Western TSS when entering or leaving San Francisco.
NOTE J
IMO - adopted Recommended Tracks for vessels 300 gross tons and above (except those carrying hazardous cargo in bulk or crude oil).
NOTE C
The U.S. Coast Guard operates an Offshore Vessel Movement Reporting System (OVMRS) covering the seaward approaches to San Francisco Bay. All commercial vessels over 300 gross tons and all tugs with tows are requested to contact Vessel Traffic Service San Francisco on VHF-FM channel 12 (156.60 MHz) when entering this area. All vessels in the area are encouraged to listen on channel 12 at fifteen and forty-five minutes past each hour for broadcast reports of known shipping traffic in the area. Additional information on the OVMRS is published in Coast Pilot 7 and information concerning specific operating procedures is available from the VTS.
NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in San Francisco, California.
Refer to charted regulation section numbers.
Loma Prieta
3791
Swanton
Scott Cr
El Jarro Pt
TOWER
Cement Plant
Davenport
Majors
Sand Hill Bluff
Table Rk
Nelson Rk
SPIRE
SANTA CRUZ
TANK
(S of 2)
DOME
SANTA CRUZ HARBOR
HORN
Pt Santa Cruz
Fl 5s 60ft 12M
RW "SC"
Mo (A)
WHIS
Soquel
Capitola
Aptos
CHY
Twin Lakes
(KSCO
(1080 kHz)
TRS
Soquel Pt
SOQUEL COVE
Watsonville
RED SAND HILL
Pajaro R
NAVAL
OPERATING
AREA
334.1150 (see note A)
SECURITY ZONE (33 CFR 165.1183)
TERRITORIAL SEA (see note Y)
MONTEREY
BAY
Fl (3) 25s
Priv
Oc R 4s 22ft 4M "2"
HORN Ra Ref
Elkhorn Slough
STACK (S OF TWO)
Moss Landing Harbor
Moss Ldg
Priv Aids
Dump Site 177
(dredged material)
Depths from survey
of 1933
(see note S)
Monterey
Canyon
Castroville
SPRR
Salinas R
SAND BUNKER
NORTH R TR
(KIDD) 630 kHz
Marina
AERO
Rot W & G
RESTRICTED
AREA
334.1180
(see note A)
PROHIBITED AREA
334.1150 (see note A)
PT PINOS LT
Oc 4s 89ft 17M
Fl R 6s BELL
Pt Pinos
Lighthouse
Pacific
Grove
Lovers Pt
Fl R 4s BELL
Pt Cabrillo
R TR (KESE)
1240 kHz
MONTEREY
HBR
Oc R 4s 20ft 6M "6"
HORN
MONTEREY
CG
MON
Seaside
Del Monte
Hotel
Monterey Peninsula
AERO Rot W & G
WHITE HO
Cypress Pt
Lighthouse
Fl R 2.5s GONG
Loma Alta
Chart 18685
Joins page 19
SEA OTTER RFUGE
The State of California Fish and Game Code prohibits the use of bows and firearms and the trapping of birds and mammals in the California
37°
50'
40'



31st Ed., Jun. / 05 ■ Corrected through NM Jun. 11/05
Corrected through LNM Jun. 7/05

18680

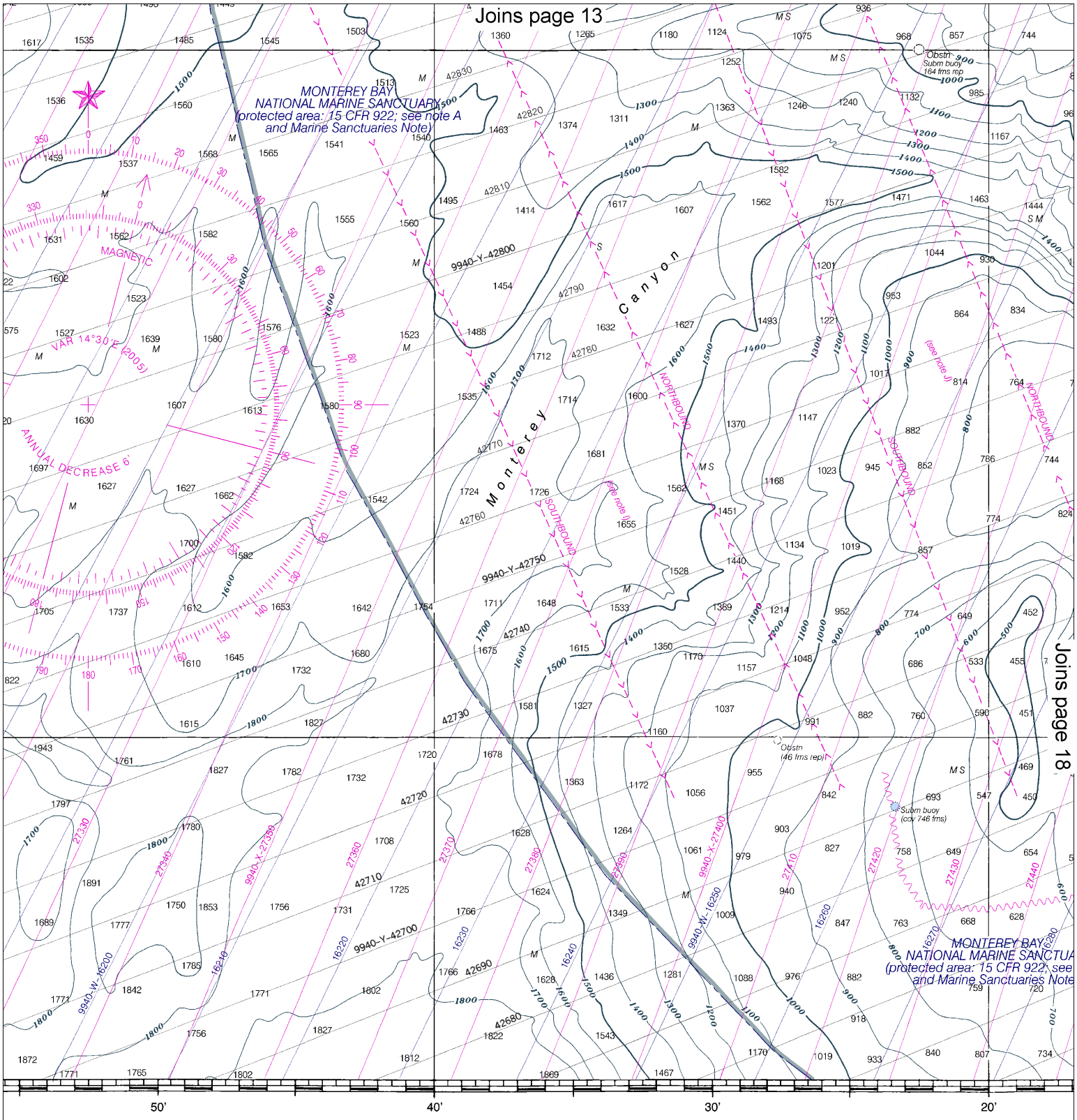
LORAN-C OVERPRINTED

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

SOUNDING

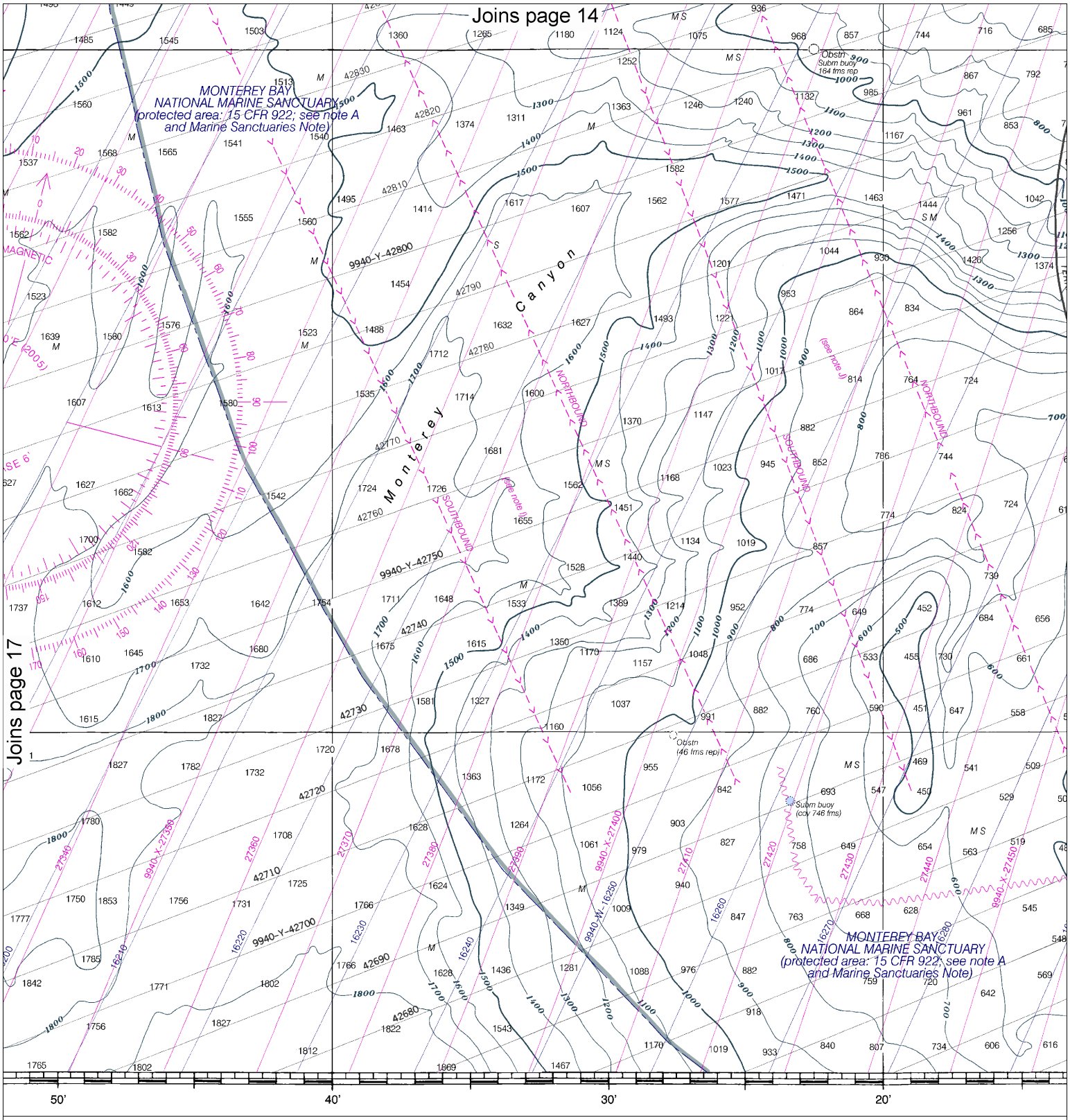
Note: Chart grid lines are aligned with true north.



GS IN FATHOMS

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS		1		2		3
FEET		6		12		18
METERS	1	2	3	4	5	6

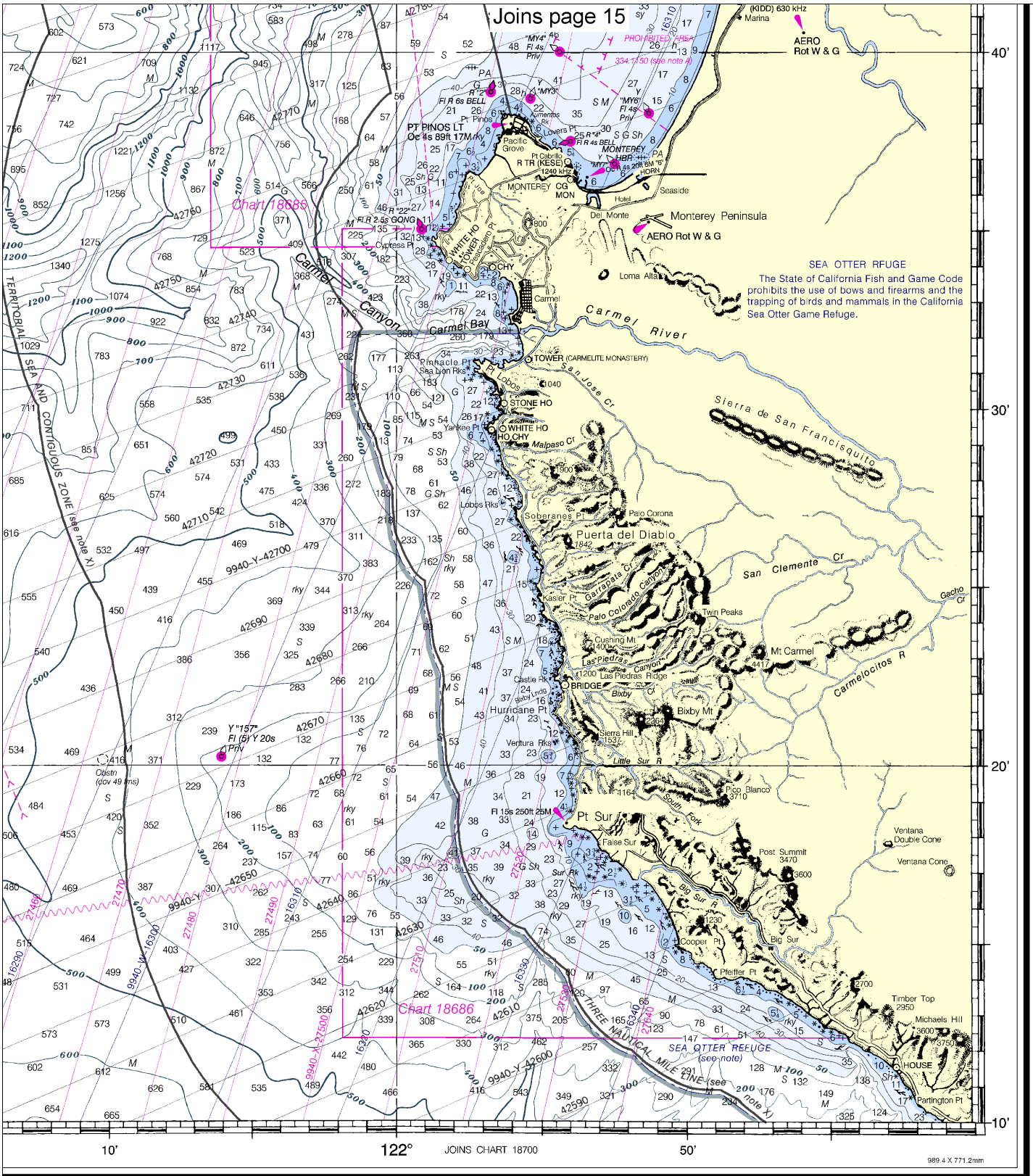


FATHOMS

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2	3	4	5	6	7	
FEET	6	12	18	24	30	36	42	
METERS	1 2	3	4	5	6	7	8	9 10 11 12 13 14

Note: Chart grid lines are aligned with true north.



Point Sur to San Francisco

SOUNDINGS IN FATHOMS - SCALE 1:210,668

18680

LORAN-C OVERPRINTED

EL NO. 31

NSN 7642014011505 NGA REFERENCE NO. 18ACO18680

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

Nautical chart related products and information	—	**http://www.nauticalcharts.noaa.gov**
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Report a chart discrepancy	—	**http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs**
Chart updates (LNM and NM corrections)	—	**http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html**
Coast Pilot online	—	**http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm**
Tides and Currents	—	**http://tidesandcurrents.noaa.gov**
Marine Forecasts	—	**http://www.nws.noaa.gov/om/marine/home.htm**
National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

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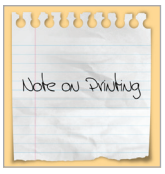

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NOAA's Office of Coast Survey The Nation's Chartmaker